

WHAT WE CLAIM IS:

1. A method of phospholamban polymorphism assessment in an individual comprising the steps of:
  - a. obtaining a sample from the individual;
  - b. isolating a nucleotide fragment containing a phospholamban coding  
5 region from the sample;
  - c. analyzing the nucleotide fragment; and
  - d. comparing the analysis of the nucleotide fragment with a predetermined phospholamban nucleotide fragment sequence to determine whether the individual carries a phospholamban polymorphism.
2. The method according to claim 1, wherein the sample comprises blood sample, tissue sample, or combinations thereof.
3. The method according to claim 1, wherein the step of analyzing the nucleotide fragment comprises the steps of:
  - a. amplifying the nucleotide fragment;
  - b. purifying the amplified nucleotide fragment; and
  - 5 c. sequencing the purified nucleotide fragment.
4. The method according to claim 1, wherein the step of analyzing the nucleotide fragment comprises the steps of:

- a. amplifying the nucleotide fragment;
  - b. purifying the amplified nucleotide fragment; and
  - 5 c. subjecting the amplified nucleotide fragment to restriction endonuclease enzyme analysis.
- 5. The method according to claim 1, wherein the individual has or is at risk for developing cardiovascular disease.
  - 6. The method according to claim 5, wherein the cardiovascular disease comprises hypertrophy, dilated cardiomyopathy, heart failure, myocardial infarction, hypertension, stroke, or combinations thereof.
  - 7. The method according to claim 1, wherein the phospholamban polymorphism is in the homozygous form.
  - 8. The method according to claim 1, wherein the phospholamban polymorphism is in the heterozygous form.
  - 9. The method according to claim 7, wherein the homozygous form of the phospholamban polymorphism comprises a change of nucleotide acid 116 from nucleic acid T to nucleic acid G in both alleles.
  - 10. The method according to claim 8, wherein the heterozygous form of the phospholamban polymorphism comprise a change of nucleotide 116 from nucleic acid T to nucleic acid G in one allele.

11. The method according to claim 9, wherein the homozygous form of the phospholamban polymorphism comprises a change in codon 39 from a Leucine codon to a stop codon in both alleles.
12. The method according to claim 10, wherein the heterozygous form of the phospholamban polymorphism comprises a change in codon 39 from a Leucine codon to a stop codon in one allele.
13. The method according to claim 11, wherein the homozygous form of the phospholamban polymorphism comprises removal of a restriction endonuclease site in both alleles.
14. The method according to claim 12, wherein the heterozygous form of the phospholamban polymorphism comprises removal of a restriction endonuclease site in one allele.
15. An isolated phospholamban polymorphism fragment comprising SEQ ID NO:1.
16. A method for determining if an individual is at risk for developing a cardiovascular disease, comprising
  - a. obtaining a sample from the individual;
  - b. isolating a nucleotide fragment containing a phospholamban coding region from the sample;
  - c. analyzing the nucleotide fragment; and

d. comparing the analysis of the nucleotide fragment with a predetermined phospholamban nucleotide fragment sequence to determine whether the individual carries a phospholamban polymorphism characteristic of an increased risk of developing cardiovascular disease.

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17. A method for determining if an individual is at risk for developing a cardiovascular disease, comprising analyzing a sample from the individual to determine the presence of a phospholamban polymorphism characteristic of an increased risk of developing cardiovascular disease.